

Abstract

A magneto impedance sensor element with electromagnetic coil comprised of: a terminal board (1) on which an extended groove (11) which extends in one direction has been formed; an electromagnetic coil(3), made with one part of the coil (31) formed in a spiral shape inside the extended groove (11) in the terminal board (1), and joined to each tip of that coil the other part of the coil (32) placed across the top of the groove; insulating material (4) placed in the extended groove (11) on the terminal board(1); and a magnetic sensitive body (2) inserted within the insulating material (4), to which either high frequency or pulse electric current is applied. When either high frequency or pulse electrical current is applied to the magnetic sensitive body, voltage is output from the above electromagnetic coil in response to the intensity of the external magnetic field which is generated in the electromagnetic coil.